AMENDMENT

In The Claims:

The claims of the application have been amended as shown in the following marked copies of the claims, which replace all prior versions thereof.

1-22. (Previously canceled).

23. (Previously presented): A method of utilizing an adaptive speaker identity verification system comprising:

receiving first input solely utilizing the adaptive speaker identity verification system, wherein the first input data represents a person's unclassified speech;

receiving second input solely utilizing the adaptive speaker identity verification system, wherein the first input data represents in part probability distributions for authentic and spurious classes based upon the pooled output statistics of the adaptive speaker identity verification system, including the equal error rate, and which represents in part optional parameters to focus on at least one region of interest in a decision space;

computing a transform of the first input data using the second input data with a normalized detector scale transformer solely utilizing the adaptive speaker identity verification system onto a normalized, one dimension, decision scale based on the transform; and

establishing at least one decision criterion solely utilizing the adaptive speaker identity

verification system, wherein the at least one decision criterion corresponds to a level of similarity

or a level of dissimilarity between the first input data representing a person's unclassified speech

data and the second input data with the adaptive speaker identity verification system.

24. (Previously canceled).

25. (Previously presented): The method of claim 23, wherein the at least one region of

interest in a decision space includes at least two regions of interest in a decision space that are

mapped onto the normalized, one dimension, decision scale.

26. (Previously presented): The method of claim 25, wherein the values of the

normalized, one dimension, decision scale range from 0 to 100.

27. (Previously presented): The method of claim 25, wherein the at least two regions of

interest in a decision space that are mapped onto the normalized, one dimension, decision scale is

performed through linear interpolation.

28. (Previously presented): The method of claim 25, wherein the at least two regions of

interest in a decision space comprise varying degrees of similarity or varying degrees of

dissimilarity.

29. (Previously presented): The method of claim 23, wherein the second input data further comprises at least one optional transform parameter.

30. (Previously presented): The method of claim 23, wherein the normalized, one dimension, decision scale is linear in cumulative probability.

31. (Previously presented): The method of claim 23, wherein the normalized, one dimension, decision scale is derived from a ratio of probabilities of an error.

32-34. (Previously canceled).

35. (Previously presented): An adaptive speaker identity verification system comprising:

an adaptive speaker identity verification system, which directly receives first input data, which represents a person's unclassified speech, and directly receives second input data, which represents in part probability distributions for authentic and spurious classes based upon the pooled output statistics of the adaptive speaker identity verification system, including the equal error rate, and which represents in part optional parameters to focus on at least one region of interest in a decision space, wherein the adaptive speaker identity verification system then computes a transform of the first input data using the second input data with a normalized detector scale transformer solely utilizing the adaptive speaker identity verification system onto a

normalized, one dimension, decision scale based on the transform and then the adaptive speaker

identity verification system establishes at least one decision criterion, wherein the at least one

decision criterion corresponds to a level of similarity or a level of dissimilarity between the first

input data representing a person's unclassified speech data and the second input data solely

utilizing the adaptive speaker identity verification system.

36. (Previously canceled).

37. (Previously presented): The system of claim 35, wherein the computing of the
transform includes combining the class-specific probability distributions.

38. (Previously presented): The system of claim 35, wherein the at least one region of
interest in a decision space includes at least two regions of interest in a decision space that are
mapped onto the normalized, one dimension, decision scale.

39. (Previously presented): The system of claim 35, wherein the values of the
normalized, one dimension, decision scale range from 0 to 100.

40. (Previously canceled).

41. (Previously presented): The system of claim 35, wherein the at least two regions of interest in a decision space represent varying degrees of similarity or varying degrees of dissimilarity.

42. (Previously presented): The system of claim 35, wherein the normalized, one dimension, decision scale is linear in cumulative probability.

43. (Previously presented): The system of claim 35, wherein the normalized, one dimension, decision scale is derived from a ratio of probabilities of an error.

44. (Previously presented): The system of claim 35, wherein the at least one decision criterion defines a single threshold number corresponding to the level of similarity or the level of dissimilarity.

45-51. (Previously canceled).

52. (Previously presented): The method of claim 26, wherein the normalized, one dimension, decision scale range is calibrated to set the equal error rate at a value of 50 on the normalized, one dimension, decision scale.

53. (Previously presented): The method of claim 23, wherein the person's unclassified speech includes both physiological and behavioral characteristics.

54. (Previously presented): The system of claim 39, wherein the normalized, one dimension, decision scale range is calibrated to set the equal error rate at a value of 50 on the normalized, one dimension, decision scale.

55. (Previously presented): The system of claim 35, wherein the person's unclassified speech includes both physiological and behavioral characteristics.

56. (Previously presented): The system of claim 38, wherein the at least two regions of interest in a decision space that are mapped onto the normalized, one dimension, decision scale is performed through linear interpolation.

57. (Previously presented): The system of claim 35, wherein the at least two regions of interest in a decision space comprise varying degrees of similarity or varying degrees of dissimilarity.

58. (Previously presented): The system of claim 35, wherein the second input data further comprises at least one optional transform parameter.

59. (Previously presented): The method of claim 23, wherein the at least one decision criterion defines a single threshold number corresponding to the level of similarity or the level of dissimilarity.